Complete Summary

TITLE

Asthma: the percentage of patients aged eight and over diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility.

SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients aged eight and over, diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility.

RATIONALE

Asthma is a common condition which responds well to appropriate management and which is principally managed in primary care. This measure is one of four Asthma measures. This indicator set was informed by the British Thoracic Society (BTS)/ Scottish Intercollegiate Guidelines Network (SIGN) guidelines which were published in early 2003.

Accurate diagnosis is fundamental in order to avoid untreated symptoms as a result of under-diagnosis, and inappropriate treatment as a result of over-

diagnosis. Both scenarios have implications both to the health of the patient, and the cost of providing healthcare. National and international guidelines emphasise the importance of demonstrating variable lung function in order to confirm the diagnosis of asthma. "Variability of peak expiratory flow (PEF) and forced expiratory volume in one second (FEV1), either spontaneously over time or in response to therapy is a characteristic feature of asthma." [The British Thoracic Society/Scottish Intercollegiate Guideline Network. British Guideline on the management of asthma. 2008] "...measurements of airflow limitation, its reversibility and its variability are considered critical in establishing a clear diagnosis of asthma" [Global Strategy for Asthma Management and Prevention]. One peak flow measurement provides no information about variability and therefore can neither confirm, nor refute, the diagnosis.

Objective measurement of variability either spontaneously over time or in response to therapy is thus fundamental to the diagnosis of asthma, and may be conveniently achieved in primary care with serial peak flow measurements. Significant variability in peak flow is defined as a change of 20 percent or greater with a minimum change of at least 60 l/min ideally for three days in a week for two weeks seen over a period of time and may be demonstrated by monitoring diurnal variation, demonstrating an increase after therapy (15 minutes after short-acting bronchodilator, after six weeks inhaled steroids, two weeks oral steroids) or a reduction after exercise or when the patient next meets his/her trigger. Spirometry (greater than 15 percent and 200ml change in FEV1) may still be used to confirm variability, though the limitation imposed by a surgery-based measurement means that changes over time may be missed.

It is important to recognise that while repeated normal readings in a symptomatic patient cast doubt on a diagnosis of asthma, the natural variation of the disease means that many patients with asthma will not necessarily have significant variability at any given time. Confirmation of the diagnosis may therefore require further recordings, e.g., during a subsequent exacerbation. In circumstances of persisting doubt then more specialist assessment is required which may include hyper-responsiveness testing and consideration of alternative diagnoses.

It is of note that a proportion of patients with chronic obstructive pulmonary disease (COPD) will also have asthma (i.e., they have large reversibility – 400 mls or more on FEV1 – but do not return to over 80 percent predicted) and a significant smoking history. Evidence would suggest that this should not usually be more than 15 percent of the overall COPD population.

PRIMARY CLINICAL COMPONENT

Asthma; measures of variability or reversibility

DENOMINATOR DESCRIPTION

Patients age eight and over diagnosed as having asthma from 1 April 2006

NUMERATOR DESCRIPTION

Number of patients from the denominator with measures of variability or reversibility

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting
Pay-for-performance

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age greater than or equal to 8 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients aged eight and over diagnosed as having asthma from 1 April 2006*

*__Note__: The Quality and Outcomes Framework (QOF) includes the concept of exception reporting. This has been introduced to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect.

The following criteria have been agreed for exception reporting:

A. patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding twelve months
B. patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances, e.g., terminal illness, extreme frailty
C. patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within three months and delivery of clinical standards within nine months, e.g., blood pressure or cholesterol measurements within target levels
D. patients who are on maximum tolerated doses of medication whose levels remain suboptimal
E. patients for whom prescribing a medication is not clinically appropriate, e.g., those who have an allergy, another contraindication or have experienced an adverse reaction
F. where a patient has not tolerated medication
G. where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
H. where the patient has a supervening condition which makes treatment of their condition inappropriate, e.g., cholesterol reduction where the patient has liver disease
I. where an investigative service or secondary care service is unavailable

Refer to the original measure documentation for further details.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Patients age eight and over diagnosed as having asthma from 1 April 2006

Exclusions
See "Description of Case Finding" field for exception reporting.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of patients from the denominator with measures of variability or reversibility

Exclusions
Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Episode of care

DATA SOURCE

Medical record
Registry data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Payment stages: 40-80%

EVIDENCE FOR PRESCRIPTIVE STANDARD

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Asthma 8. The percentage of patients aged eight and over diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility.

MEASURE COLLECTION

Quality and Outcomes Framework Indicators

MEASURE SET NAME

Asthma

DEVELOPER

British Medical Association
National Health Service (NHS) Confederation

FUNDING SOURCE(S)

The expert panel who developed the indicators were funded by the English Department of Health.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

The main indicator development group is based in the National Primary Care Research and Development Centre in the University of Manchester. They are:

Professor Helen Lester, NPCRDC, MB, BCH, MD; Dr. Stephen Campbell, NPCRDC, PhD; Dr. Umesh Chauhan, NPCRDC, MB, BS, PhD.

Others involved in the development of individual indicators are: Professor Richard Hobbs, Dr. Richard McManus, Professor Jonathan Mant, Dr. Graham Martin, Professor Richard Baker, Dr. Keri Thomas, Professor Tony Kendrick, Professor Brendan Delaney, Professor Simon De Lusignan, Dr. Jonathan Graffy, Dr. Henry Smithson, Professor Sue Wilson, Professor Claire Goodman, Dr. Terry O'Neill, Dr. Philippa Matthews, Dr. Simon Griffin, Professor Eileen Kaner.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

None for the main indicator development group.

ENDORSER

National Health Service (NHS)

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2004 Apr

REVISION DATE

2009 Mar

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: British Medical Association (BMA), and NHS Employers. Quality and outcomes framework guidance for GMS contract 2008/09. London (UK): British Medical Association, National Health Service Confederation; 2008 Apr. 148 p.

SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

MEASURE AVAILABILITY

The individual measure, "Asthma 8. The Percentage of Patients Aged Eight and Over Diagnosed as Having Asthma From 1 April 2006 with Measures of Variability

or Reversibility," is published in the "Quality and Outcomes Framework Guidance." This document is available from the British Medical Association Web site.

NQMC STATUS

This NQMC summary was completed by ECRI on October 9, 2006. The information was verified by the measure developer on November 1, 2006. This NQMC summary was updated by ECRI Institute on January 28, 2009. This NQMC summary was updated again by ECRI Institute on October 1, 2009. The information was verified by the measure developer on March 4, 2010.

COPYRIGHT STATEMENT

Disclaimer

NQMC DISCLAIMER

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria which may be found at http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

Date Modified: 4/19/2010